

July XX, 2014

Steven Bohlen
Oil and Gas Supervisor
Division of Oil, Gas and Geothermal Resources
California Department of Conservation
801 K Street
Sacramento, California 95814-3530

Dear Mr. Bohlen:

In 1983, the U.S. Environmental Protection Agency, Region 9 (EPA) approved the California Division of Oil, Gas and Geothermal Resources' (DOGGR) request for regulatory primacy for the Class II Underground Injection Control (UIC) Program (State Program) under Section 1425 of the Safe Drinking Water (SDWA). Primacy requires that DOGGR administer the State Program in accordance with the State's approved statutes and regulations, applicable federal statutes and regulations, and the requirements and procedures described in a September 1982 Memorandum of Agreement (MOA) between EPA and DOGGR. EPA's approval also granted numerous aquifer exemptions that DOGGR requested in its primacy application.

After primacy approval, EPA retained responsibility to oversee the State Program to ensure conformance with the SDWA and the conditions of primacy. As part of that responsibility, EPA issued guidances and clarifying correspondence, including its May 17, 1985 letter from the Director of the Water Management Division, Frank M. Covington. Additionally, EPA conducted an audit of the State Program in 2011 that highlighted specific deficiencies requiring clarification and resolution by DOGGR. In 2012, EPA performed an additional review focused on aquifer exemptions, which raised questions about the alignment of Class II injection wells with approved aquifer exemption boundaries. Recently, in cooperation with other State agencies, DOGGR determined that it had authorized some injection of oil and gas-related disposal fluids into non-exempt aquifers containing high quality water, and identified the presence of water supply wells in the vicinity of some of the injection wells. Considering this information, EPA has determined in collaboration with DOGGR that circumstances warrant a thorough program review and potential program revisions in accordance with 40 C.F.R. § 145.32.

EPA recognizes that the State has initiated its own thorough review to address the above issues, including the recent issuance of seven orders requiring the affected operators to cease injection in non-exempt, non-hydrocarbon-bearing aquifers and to submit data needed to assess the potential threat to human health and potential impacts to water quality from the subject injection wells. DOGGR has also initiated a broader review of Class II injection in the State to ensure wells have been appropriately authorized to inject within the aquifer exemption boundaries approved by EPA. This review involves investigation and review of files for existing Class II well permits and GIS mapping of

the wells in question. EPA commends the State for its actions to date and looks forward to working with the State to complete any necessary program revisions.

To initiate the program review/revision process and gather necessary information pursuant to the provisions of 40 C.F.R. §§145.32 and 145.14(a), EPA requests that DOGGR include in its review the following actions, and provide the following information to EPA:

1. Drinking Water Source Evaluation

EPA understands that DOGGR's current review addresses both private and public water system drinking water sources, in coordination with the State Water Resources Control Board, Regional Water Quality Control Boards, and California Department of Public Health. EPA requests that the State provide, within 90 days of receipt of this letter, its assessment of whether existing and potential sources of drinking water are at risk of contamination from improper Class II injection, including the following:

- a. The location of private and public water system wells that may be at risk due to injection into higher-quality aquifers.
- b. A plan to ensure protection of human health from actual or potential exposure to drinking water affected by any injection wells.
- c. A plan to communicate this information to the public and to address subsequent questions and concerns.

2. Documentation of Aquifer Exemptions

When EPA approved State primacy in 1983, EPA also approved a number of aquifer exemptions. A recent review of available records has yielded conflicting information as to whether some of the aquifer exemptions requested by the State were approved at the time of primacy. We understand the imperative of clarifying this matter and are actively evaluating available records. To facilitate our evaluation, EPA and DOGGR will provide each other with any and all documents that pertain to the State's requests for aquifer exemptions, EPA's approval or denial of such requests, any post-primacy appeals by the State regarding aquifer exemptions, and any documentation underlying Mr. Covington's 1985 letter described above. Such documentation will be exchanged within 120 days of receipt of this letter.

3. Tiered Review of Class II Wells

Any injection from Class II wells in an aquifer that meets the definition of an underground source of drinking water (USDW), absent an EPA-approved aquifer exemption, is inconsistent with UIC regulations and State Program primacy requirements. EPA understands the State is currently evaluating all potential Class II wells that may be injecting at such locations. EPA supports the State's plans to complete the review of all affected wells within the next several

months, and to take responsive action to protect USDWs, with priorities for review based on proximity to water supply wells and the potential that receiving formations may be in current use as sources of drinking water. Please provide the following:

- a. Within 120 days of receipt of this letter, the number and location of all Class II wells, by DOGGR district, permitted to inject in non-hydrocarbon-producing non-exempt aquifer formations with water quality below 10,000 mg/L total dissolved solids (TDS). For each identified well, please include the operator's name, well type, depth, field and formation names, date injection commenced, the water quality (TDS) of both the injection formation and the injection fluid, and any other pertinent details. In addition, please provide any associated orders or actions to cease injection in such formations (excluding the seven orders dated July 1, 2014), and plans to ensure future protection of USDWs.
- b. Within 90 days of receipt of this letter, the number and location of all Class II wells, by DOGGR district, permitted to inject in hydrocarbon -producing aquifer formations with water quality below 10,000 mg/L TDS, located in non-exempt aquifers. For each identified well, please include the operator's name, well type, depth, field and formation names, date injection commenced, the water quality (TDS) of both the injection formation and the injection fluid, and any other pertinent details.
- c. Within 60 days of receipt of this letter, a plan and timeline for submission to EPA of any new or revised aquifer exemption requests, which the State determines are appropriate.

4. State Program Conformity

DOGGR provided an action plan to EPA on November 16, 2012, in response to EPA's 2011 audit of the State Program's conformity with federal regulations. Required changes included conformity with the regulatory definition of underground sources of drinking water and improved procedures for other program components. Please provide, within 30 days of receipt of this letter, a status report on DOGGR's progress on this action plan, along with a schedule for any plan revisions and for completing implementation of the action plan.

Your submittals should be sent to:

David Albright
Ground Water Office (WTR-9)
U.S. EPA Region 9
75 Hawthorne Street
San Francisco, CA 94105

Thank you for your prompt attention and continued partnership as we pursue resolution of these issues and potential program revisions.

Sincerely,

Jane Diamond
Director, Water Division

cc: Jason Marshall, Deputy Director, California Department of Conservation
Bruce Reeves, Chief Counsel, California Department of Conservation
Jonathan Bishop, Chief Deputy Director, California SWRCB
Clay Rodgers, Assistant Executive Officer, California Central Valley RWQCB
Mark Starr, Deputy Director, California Department of Public Health

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